The ILECs' efficiency argument equally overlooks the significant transactions and administrative costs in insisting that the price for interconnection, transport and termination be set through the negotiation process and/or the arbitration procedures. As Professor Brock discusses, the transaction costs of negotiating an interconnection agreement are substantial.[38] A significant part of the decision to invest by a CLEC such as TCI will hinge upon its expectation of reasonable interconnection agreements. Both the ILECs' behavior to date, as well as their objectively identified incentives and ability to delay and frustrate the interconnection process, make it less likely for CLECs to undertake the necessary risk in constructing competing networks, unless the Commission effectively implements Congress' directive to secure at least some of the risks.

In proposing negotiated solutions instead of bill and keep, the ILECs in general and Hausman in particular ignore the anticompetitive incentives of the ILECs. There are repeated references in the ILEC pleadings to allowing "market-driven" outcomes via private negotiations. But of course this argument necessarily means outcomes driven by a market in which there is market failure -- the monopoly power of the ILECs. It is of course this market failure which the 1996 Act is intended to cure. The suggestion that somehow Congress did all of this to

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38 See generally Gerald W. Brock, "Bargaining Incentives and Interconnection," Attachment to Cox Comments.

merely allow the market to correct itself is incorrect -- and certainly has no basis in economic analysis.

Hausman also misstates the argument regarding the relative costs of bill and keep. Contrary to his assertion,[39] no one has suggested that the aggregate costs of termination are de minimis or irrelevant. Rather, the opportunity for setting termination prices inefficiently high is substantial, especially in light of the low per minute TS-LRIC costs of interconnection, transport and termination in relation to the relatively high retail price of other services, e.g., switched access.[40]

Furthermore, the relative efficiency of bill and keep is self-evident from its use by adjacent ILECs in extended area service arrangements. While it is no surprise that ILECs are now scrambling to undo these arrangements precisely because they suggest the appropriate solution for compensation between themselves and CLECs, the Commission should not be fooled. Indeed, the Commission should look to such states as Wisconsin, which has recently required these adjacent LEC arrangements to

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39 Hausman at ¶ 20.

40 Hausman also asserts that the Notice has considered only the allocative effects (in getting the pricing wrong) to the sacrifice of productive efficiency. See id. But certainly the latter is not ignored once one recognizes that bill and keep does enable costs to be recovered. It further doesn't encourage inefficient choices by CLECs, as discussed above. In any event, there is no particular basis upon which to favor productive efficiency over allocative efficiency.

serve as a model for competing local carrier arrangements.[41] Further, the traditional use of such arrangements speaks volumes about the validity of ILECs' argument that bill and keep would deprive them of full cost recovery. The local telephone industry flourished under just these types of agreements for many years.[42]

In weighing the benefits of bill and keep, it is crucial for the Commission to keep focus on the fact that no usage sensitive pricing arrangement sends a fully optimal price signal. Price signals that in theory would be fully optimal are simply not practicable. In addition to "exact" costing being inconsistent with the approximate pricing standard in Section 252(d)(2)(A)(ii), efficient peak-load pricing would require positive pricing in the busy hours and zero prices at other

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41 See Investigation of the Implementation of the Telecommunications Act of 1996, Wisconsin PUC Docket No. 05-TI-140 (May 16, 1996).

42 Hausman also concedes that measuring costs is exceptionally complex, and that the use of proxies is beneficial. See Hausman at ¶ 17. It is thus surprising that he so summarily rejects a bill and keep solution. This rejection is based upon faulty assumptions, the most significant of which is that bill and keep sets the price at zero. See id. at ¶ 19. As discussed, this assumption utterly ignores the mutuality element of bill and keep. Bill and keep does not make interconnection "free," but rather streamlines the offsetting of the mutual recovery of costs for each interconnecting party. Hausman also makes the assumption that the competing interconnecting networks will have significantly different cost structures, see id., but this is equally erroneous given his concession as to the appropriateness of forward-looking cost methodologies. Using TS-LRIC, carriers are assumed to incur the costs of a state-of-art network architecture, and thus their costs should be reasonably approximated to be comparable.

hours. But even then, the disparity between the peak load price and the zero price for off peak would likely induce a "shifting peak." To avoid this consequence regulators would have to require several different positive prices over the hours of peak loads. This degree of exactitude is generally recognized, however, to be infeasible. Thus any realistic form of positive pricing for interconnection, transport and termination will result in some degree of inefficiency. Nevertheless, the bottom line for the essential policy goal remains: the risk of hindering competition and reducing dynamic efficiency in local markets is greater with positive prices for interconnection, transport and termination than with bill and keep, for the risk of setting excessive interconnection prices is ever present in setting the positive price.

3. The Cost Of Interconnection, Transport And Termination Should Be Based On TS-LRIC.

Finally, the ILECs argue that certain conditions attach to the existing market that make the use of forward-looking cost methodologies in general and TS-LRIC in particular inappropriate. As discussed in detail below, these arguments are unpersuasive.

At the outset, it is significant to note that even the ILEC experts recognize, as they must, that some sort of long run incremental cost-based price would be the economically efficient principle for the Commission to use.[43] As TCI explained in its

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[43] See Hausman at ¶¶ 3, 7, 13; Declaration of Robert W. Crandall, Attachment to Comments of Bell Atlantic

Comments,[44] the theoretically optimal approach to pricing is to base prices on economic costs. The most appropriate methodology for doing this in the present context is TS-LRIC. TS-LRIC accounts for the full incremental costs (i.e. both fixed and variable) of providing a service. It therefore captures more accurately the cost of providing a service than long run incremental cost ("LRIC") which includes only the variable incremental costs of providing a service.

Notwithstanding concessions as to the appropriateness of forward-looking methodologies, ILECs argue that interconnection, transport and termination cannot be priced at economic cost because the presence of regulatory distortions in existing telephone company prices creates arbitrage opportunities. They argue that many ILEC services are not priced at cost, and many users may be given different regulatory categories of interconnection arrangements with different price structures and levels.[45]

("Crandall") at ¶¶ 10, 20. Several parties at least agree that historical cost methodologies using traditional rate-of-return concepts are not permitted by the statute. See, e.g., Comments of CoPUC at 33-34. Colorado nevertheless argues that given the complexities of the task, pricing should be left to the states. As discussed earlier, however, the need for national rules is particularly acute given the ambiguities and complexities that inhere in deriving appropriate prices for interconnection.

44 See Comments of TCI at 28-34.

45 Hausman at ¶¶ 4, 9.

But surely, the correct policy response is not to extend these distortions to the new local exchange competitors. To do so would be to give up, or at least delay beyond the statutory deadlines, implementation of Congress' primary goal: the introduction of efficient competition for local exchange service. Dr. Hausman is, of course, correct about the regulatory distortions that pervade much of telephone prices, but the responsible answer is to fix them -- not to handicap new entrants.[46]

A second argument of the ILEC interests is to threaten to go out of business. For example, Dr. Hausman asserts that "if all prices are set at TS-LRIC or LRIC, LEC total costs will not be recovered. . . ."[47] These arguments misstate the effects of TS-LRIC in cost recovery, and also ignore the consumption and investment effects of setting interconnection, transport and termination above incremental costs.

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[46] The Notice correctly notes the need for access charge reform, for example. See Local Competition Notice at ¶ 3. Congress has also required reformation of the universal mechanisms, a task which is already underway. See Federal-State Joint Board on Universal Service, Notice of Proposed Rulemaking, CC Docket No. 96-45 (release March 8, 1996). In the interim, the Notice proposes to more directly minimize the arbitrage opportunities, such as precluding interexchange carriers from buying unbundled network elements in lieu of access charges. See Local Competition Notice at ¶ 164.

[47] Hausman at ¶ 10.

The ILECs assert that because they are multiproduct firms whose costs exhibit both scale and scope economies, incremental cost methodologies will not allow full cost recovery. Under TS-LRIC, prices are likely to recover a large portion of forward-looking costs. TS-LRIC includes the fixed costs of the service; it does not, however, include a contribution to common costs that are shared with other services to the extent they exist and are actually demonstrated persuasively by the ILEC.[48]

The ILECs' arguments also frequently fail to distinguish between the recovery of forward-looking costs and historical

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[48] The magnitude of these common costs is of course unrevealed in the record. While Doane, Sidak and Spulber purport to quantify these costs, no conclusion can be drawn from the "data" presented since it has been redacted. See Michael J. Doane, J. Gregory Sidak, Daniel F. Spulber, "An Empirical Analysis of Pricing Under Section 251 and 252 of the Telecommunications Act of 1996," Attachment to Comments of GTE ("Doane et al"). Notice and comment rulemaking does not allow for this type of ex parte submission. Even if the data were included, any estimates reached as to the magnitude of joint and common costs would be incorrect because Doane et al incorrectly use historical costs to determine joint and common costs. See id. at I-5. In fact, under the LRIC methodology supposedly used by Doane et al, joint, shared and common costs are determined by use of only forward-looking costs. In addition, Harris and Yao assert incorrectly that certain costs, such as increased traffic loads through tandem switches, are unrecovered under TS-LRIC. See Robert G. Harris and Dennis A. Yao, "Federal Implementation Of The Telecommunications Act of 1996: Competition In The Local Exchange," Attachment to Comments of U S WEST at 21. These costs are however properly accounted for in TS-LRIC. Harris and Yao also create some imagined unrecovered costs, such as network planning uncertainty. But with SS7 signaling, the ILEC will ordinarily know the origin of incoming calls, so the perceived uncertainty does not exist.

costs.[49] Prices set at TS-LRIC may recover a part of overall ILEC revenue requirements, as they assert, but these revenue requirements are historic costs, inappropriately included in the pricing of interconnection.[50] As discussed elsewhere, the problem of unrecovered sunk costs is not one to be visited upon new entrants or their customers.[51]

When properly examined in the context of forward-looking costs, there are a number of good reasons to conclude that only a strictly defined, proportionate share of common costs should be recovered from interconnection, transport and termination

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49 For example, Hausman states that the "common costs which arise from network economies of scale and scope . . . include historical costs of network investment." Hausman at ¶ 10. Doane et al. also use forward-looking cost ("TS-LRIC") and historic cost data (service prices set by rate of return regulation based on historic costs) in the same equation to estimate joint, shared and common costs. See Doane et al at I-5.

50 It should be noted that Pacific Telesis has recently asserted in a California local competition proceeding that it is entitled to recover $4.7 billion in historical costs. See Testimony of Peter A. Drake, Vice President, Chief Financial Officer and Controller, Pacific Bell in California PUC Docket No. R.95-04-043/I.95-04.044. This is exactly the kind of assertion that must be rejected. Clear national rules preventing the recovery of such historical costs would obviate the need for the pending review in which the California PUC is now engaged.

51 See Comments of TCI at 28-31. As Hausman acknowledges, it is sound policy to avoid the "taxing" of intermediate goods in order to avoid inefficient input choices. See Hausman at ¶ 10 n.2. Transport and termination is plainly an intermediate good.

services.[52] At the outset, it needs to be underscored that the allocation of common costs is inherently arbitrary. No allocator is necessarily "correct" and thus it is appropriate for the policymakers to eschew the search for the "right" answer and instead set allocation rules to serve an explicit policy objective.[53] There are substantial problems with allowing ILECs the maneuverability to allocate costs in their self-interest. And because common costs are difficult to quantify, almost any requirement for contribution will engender the well-understood opportunities for cross-subsidization with which this agency is all too familiar.

Further, over-recovery of joint and common costs from interconnection, transport and termination prices will distort consumption of the CLEC retail services. If above-cost

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52 In theory the allocation of the joint and common costs should be based on a determination of the demand elasticities of the services in question. But this is not a practical approach because, even if the Commission had adequate data on the subject, which it does not, achieving any measure of exactitude as to relative demand elasticities would be extremely difficult. A proportionate allocation of joint and common costs is therefore the most practical approach.

53 See Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services, FCC No. 96-214 (released May 10, 1996); see also MCI Telecommunications Corp. v. FCC, 675 F.2d 408, 415-416 (D.C. Cir. 1982) ("The very problem at issue here -- allocation of common costs -- arises precisely because there is no purely economic method of allocation. In this sense no Commission choice among the various methods could be justified solely on economic criteria; elements of fairness and other noneconomic values inevitably enter the analysis of the choice to be made.").

interconnection prices are reflected in the CLEC retail prices (as they must be), then end user consumption will be inefficiently suppressed. Moreover, CLEC investment decisions will be made inefficiently in the presence of above-cost interconnection prices. If efficient entry is deterred, there is also a loss of the consumer surplus (resulting from lower prices and increased efficiencies) that would otherwise occur from the advent of local exchange competition.

Finally, to the extent proxies are developed for interconnection, transport and termination costs, it is unlikely that any explicit contribution to joint and common costs will be necessary. This is because these rates will, by necessity, be only approximations of the TS-LRIC costs. As such, they are likely to include some contribution to common costs, especially when set as ceilings.

C. A Bill And Keep Approach Would Not Violate The Taking Clause Of The Fifth Amendment.

Finally, the ILECs argue that the adoption of bill and keep would amount to a taking without just compensation under the Fifth Amendment.[54] In particular, the ILECs assert that the statutory requirements of interconnection, transport and termination constitute a per se physical taking. Since bill and

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[54] See Comments of NYNEX at 89-90 (characterizing bill and keep arrangements that do not permit parties to recover their costs as "confiscatory"); Bell Atlantic at 41-42; USTA at 84; BellSouth at 74-75; GTE at 57-58.

keep does not permit carriers to recover the costs incurred in fulfilling these requirements, the argument goes, the ILECs have not been adequately compensated for the occupation of their property in violation of the Fifth Amendment.

While the ILECs offer some rhetoric in support of this argument, they do not and cannot, offer any legal support for the position. First, the requirements to interconnect with other carriers and transport and terminate calls originating on other networks do not amount to a per se physical taking. A per se physical taking occurs only where a regulation results in a "permanent physical occupation of real property."[55] Yet the obligation to interconnect at any technically feasible point established in Section 251(c)(2) does not require that ILECs relinquish control of any real property interest on either a temporary or permanent basis. In the case of transport and termination, for example, interconnection will usually involve meet-point arrangements which do not implicate ILEC real property interests. In fact, the ILEC obligation to extend a line to a meet point for interconnection with the CLEC involves the construction of personal property, not the occupation of real property.[56]

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55 Loretto v. Teleprompter Manhattan CATV Corp, 458 U.S. 419, 427 (1982).

56 See Bell Atlantic v. FCC, 24 F.3d 1441, 1446 (D.C. Cir. 1994) (implying that physical connection between carriers does not amount to a taking).

Nor does the obligation to transport and terminate traffic cause a permanent physical occupation of property over which ILECs exercise exclusive control. Rather, it involves intermittent use of a common carrier network over which the telcos have a statutory obligation to carry all calls on a nondiscriminatory basis. In fact, for the purposes of a physical taking analysis, the obligation to transport and terminate traffic is indistinguishable from the common carrier obligations already imposed on ILECs.[57]

Moreover, even if the interconnection, transport and termination requirement were a physical taking, there is no sense in which bill and keep can be understood to deny the ILECs just and reasonable compensation. In determining whether a scheme of rate regulation permits regulated firms adequate compensation, courts examine whether the rates in question "enable [a] company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risk

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[57] The ILECs' reliance on Loretto v. Teleprompter Manhattan CATV Corp. in support of the physical taking argument is unpersuasive. In Loretto, the Supreme Court found that a New York State regulation requiring landlords to permit cable companies to install facilities on their buildings constituted a taking for which just compensation was due. Loretto concerned the permanent occupation of private real property by the cable operator and is therefore entirely distinguishable from interconnection, transport and termination.

assumed."[58] Under this "end result" test, if a regulatory regime does not deprive the company as a whole of the ability to stay in business and earn a reasonable return on investments, it does not constitute a taking.[59]

The application of bill and keep to the interconnection, transport and termination will not deprive the ILECs of the opportunity to operate successfully, maintain their financial integrity, or attract capital and compensate investors. Indeed, as demonstrated in TCI's initial comments, bill and keep will permit ILECs to recover the incremental cost of providing interconnection, transport and termination service.[60] It is true that bill and keep might not permit the ILECs to recover certain of the historical costs of providing interconnection, transport and termination. But denying ILECs the right to recover historical costs through charges for the exchange of traffic will not endanger the financial integrity of the businesses.

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58 FPC v. Hope Natural Gas Co., 320 U.S. 591, 605 (1944). See Duquesne Light Co. and Pennsylvania Power Co. v. Barasch, 488 U.S. 299, 310 (1989).

59 See Duquesne Light Co. and Pennsylvania Power Co. v. Barasch, 488 U.S. at 310 ("'If the total effect of the rate order cannot be said to be unreasonable, judicial inquiry . . . is at an end.'" (quoting FPC v. Hope Natural Gas Co., 320 U.S. at 602)).

60 As discussed above, interconnection agreements between adjacent LECs generally include bill and keep for the exchange of traffic. It is difficult to see why adjacent LECs would adopt such an approach if it did not allow them to recover the costs of interconnection, transport and termination.

Moreover, the Supreme Court has specifically held that preventing a regulated firm from recovering certain historical costs is not, by itself, a taking. In Duquesne Light Company v. Barasch, the Supreme Court reviewed a taking challenge to a state law which prevented power companies from recovering certain historical pre-construction investments in subsequently canceled nuclear power plants. The Court found that the state law did not result in a taking because it did not jeopardize the ability of the regulated firms to attract capital and compensate investors.[61]

Thus, under Duquesne, the ILECs' taking argument fails. Simply put, bill and keep is not prohibited under the Fifth Amendment.

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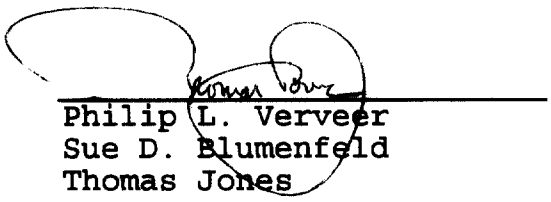
61 See id.

V. CONCLUSION

The Commission should therefore adopt interconnection rules consistent with the recommendations made in these reply comments.

Respectfully submitted,



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